

In response to that Office Action, the Examiner is respectfully requested to amend the above-identified application as follows:

IN THE CLAIMS:

Please cancel Claim 76, without prejudice or disclaimer of subject matter presented.

Please amend Claims 1, 11, 13, 14, 22, 24, 25, 35, 37, 38, 46, 48, 49, 59, 61, 62, 65, 70, and 72 to read as follows. A marked-up copy of the amended claims, showing the changes made thereto, is attached.

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1. (Twice Amended) A method of generating an image, said image to be formed by rendering and compositing at least a plurality of graphical objects, each said object having a predetermined outline, said method comprising the steps of:

a dividing step, of dividing a space in which said outlines are defined into a plurality of regions, each said region being defined by at least one region outline substantially following at least one of said predetermined outlines or parts thereof, wherein said region outlines are substantially formed by segments of a virtual grid encompassing said space;

a manipulation step, of manipulating said regions to determine a plurality of further regions, said further regions being dependent on said segments of said virtual grid, wherein each said further region has a corresponding compositing expression;

a classification step, of, classifying said further regions according to at

least one attribute of said graphical objects within said further regions;

a modification step, of modifying each said corresponding compositing expression according to a classification of each said further region to form an optimized compositing expression for each said further region compared to said corresponding compositing expression, said corresponding compositing expressions being optimized by eliminating one or more objects within said further regions from one or more of said corresponding expressions, depending on said classifications, without modifying said image to be generated; and

a generation step, of generating said image by compositing said plurality of graphical objects using each of said optimized compositing expressions.

11. (Amended) A method according to claim 1, wherein a wholly opaque object in said region acts to eliminate one or more objects within said further region from said compositing expressions.

13. (Amended) A method according to claim 7, wherein said modifying comprises modifying a manner in which said compositing expression is evaluated without modifying said hierarchically structured representation.

14. (Twice Amended) A method of generating an image, said image to be formed by rendering and compositing at least a plurality of graphical objects, each said object having a predetermined outline, said method comprising the steps of:

a dividing step, of dividing a space in which said outlines are defined into a plurality of regions, each said region being defined by at least one region outline substantially following at least one of said predetermined outlines or parts thereof, wherein said region outlines are substantially formed by segments of a virtual grid encompassing said space, wherein each object has two region outlines arranged either side of said predetermined outline to thus define three regions for each said object, and wherein each said region has a corresponding compositing expression;

a classification step, of classifying said regions according to at least one attribute of said graphical objects within said regions;

a modification step, of modifying each said corresponding compositing expression according to a classification of each said region to form an optimized compositing expression for each said region compared to said corresponding compositing expression, said corresponding compositing expressions being optimized by eliminating one or more objects within said further regions from one or more of said corresponding expressions, depending on said classifications, without modifying said image to be generated; and

a generation step, of generating said image by compositing said plurality of graphical objects using each of said optimized compositing expressions.

22. (Amended) A method according to claim 14, wherein a wholly opaque object in said region acts to eliminate one or more objects within said further region from said compositing expressions.

24. (Amended) A method according to claim 18, wherein said modifying comprises modifying a manner in which said compositing expression is evaluated without modifying said hierarchically structured representation.

25. (Twice Amended) An apparatus for generating an image, said image to be formed by rendering and compositing at least a plurality of graphical objects, each said object having a predetermined outline, said apparatus comprising:

dividing means for dividing a space in which said outlines are defined into a plurality of regions, each said region being defined by at least one region outline substantially following at least one of said predetermined outlines or parts thereof, wherein said region outlines are substantially formed by segments of a virtual grid encompassing said space;

manipulating means for manipulating said regions to determine a plurality of further regions, said further regions being dependent on said segments of said virtual grid, wherein each said further region has a corresponding compositing expression;

classifying means for classifying said further regions according to at least one attribute of said graphical objects within said further regions;

modifying means for modifying each said corresponding compositing expression according to a classification of each said further region to form an optimized compositing expression for each said further region compared to said corresponding compositing expression, said corresponding compositing expressions being optimized by eliminating one or more objects within said further regions from one or more of said corresponding expressions,

depending on said classifications, without modifying said image to be generated; and
generating means for generating said image by compositing said
plurality of graphical objects using each of said optimized compositing expressions.

35. (Amended) An apparatus according to claim 25, wherein a wholly
opaque object in said region acts to eliminate one or more objects within said further region from
said compositing expressions.

37. (Amended) An apparatus according to claim 31, wherein said
modifying comprises modifying a manner in which said compositing expression is evaluated
without modifying said hierarchically structured representation.

38. (Twice Amended) An apparatus for generating an image, said image to
be formed by rendering and compositing at least a plurality of graphical objects, each said object
having a predetermined outline, said apparatus comprising:

dividing means for dividing a space in which said outlines are defined
into a plurality of regions, each said region being defined by at least one region outline
substantially following at least one of said predetermined outlines or parts thereof, wherein said
region outlines are substantially formed by segments of a virtual grid encompassing said space,
wherein each object has two region outlines arranged either side of said predetermined outline to
thus define three regions for each said object, and wherein each said region has a corresponding

compositing expression;

classifying means for classifying said regions according to at least one attribute of said graphical objects within said regions;

modifying means for modifying each said corresponding compositing expression according to a classification of each said region to form an optimized compositing expression for each said region compared to said corresponding compositing expression, said corresponding compositing expressions being optimized by eliminating one or more objects within said further regions from one or more of said corresponding expressions, depending on said classifications without modifying said image to be generated; and

generation means for generating said image by compositing said plurality of graphical objects using each of said optimized compositing expressions.

46. (Amended) An apparatus according to claim 38, wherein a wholly opaque object in said region acts to eliminate one or more objects within said further region from said compositing expressions.

48. (Amended) An apparatus according to claim 42, wherein said modifying comprises modifying a manner in which said compositing expression is evaluated without modifying said hierarchically structured representation.

49. (Amended) A computer program product including a computer readable medium having a plurality of software modules for generating an image, said image to be formed by rendering and compositing at least a plurality of graphical objects, each said object having a predetermined outline, said computer program product comprising:

a dividing module for dividing a space in which said outlines are defined into a plurality of regions, each said region being defined by at least one region outline substantially following at least one of said predetermined outlines or parts thereof, wherein said region outlines are substantially formed by segments of a virtual grid encompassing said space;

a manipulating module for manipulating said regions to determine a plurality of further regions, said further regions being dependent on said segments of said virtual grid, wherein each said further region has a corresponding compositing expression;

a classifying module for classifying said further regions according to at least one attribute of said graphical objects within said further regions;

a modifying module for modifying each said corresponding compositing expression according to a classification of each said further region to form an optimized compositing expression for each said further region compared to said corresponding compositing expression, said corresponding compositing expressions being optimized by eliminating one or more objects within said further regions from one or more of said corresponding expressions, depending on said classifications, without modifying said image to be generated; and

a generating module for generating said image by compositing said

plurality of graphical objects using each of said optimized compositing expressions.

59. (Amended) A computer program product according to claim 49, wherein a wholly opaque object in said region acts to eliminate one or more objects within said further region from said compositing expressions.

61. (Amended) A computer program product according to claim 55, wherein said modifying comprises modifying a manner in which said compositing expression is evaluated without modifying said hierarchically structured representation.

62. (Amended) A computer program product including a computer readable medium having a plurality of software modules for generating an image, said image to be formed by rendering and compositing at least a plurality of graphical objects, each said object having a predetermined outline, said computer program product, comprising:

a dividing module for dividing a space in which said outlines are defined into a plurality of regions, each said region being defined by at least one region outline substantially following at least one of said predetermined outlines or parts thereof, wherein said region outlines are substantially formed by segments of a virtual grid encompassing said space, wherein each object has two region outlines arranged either side of said predetermined outline to thus define three regions for each said object, and wherein each said region has a corresponding compositing expression;

a classifying module for classifying said regions according to at least one attribute of said graphical objects within said regions;

a modifying module for modifying each said corresponding compositing expression according to a classification of each said region to form an optimized compositing expression for each said region compared to said corresponding compositing expression, said corresponding compositing expressions being optimized by eliminating one or more objects within said further regions from one or more of said corresponding expressions, depending on said classifications, without modifying said image to be generated; and

a generation module for generating said image by compositing said plurality of graphical objects using each of said optimized compositing expressions.

65. (Amended) A computer program product according to claim 62, wherein said grid is irregularly shaped.

70. (Amended) A computer program product according to claim 62, wherein a wholly opaque object in said region acts to eliminate one or more objects within said further region from said compositing expressions.

72. (Amended) A computer program product according to claim 66, wherein said modifying comprises modifying a manner in which said compositing expression is evaluated without modifying said hierarchically structured representation.